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ABSTRACT

This study began as a cost study of special education programs in Illinois public education. An attempt was made to determine if the burden of extraordinary, nonreimbursed costs for special education programs was divided equally or unequally among school districts in Illinois. However, two problems with the data source were discovered. Illinois does not require school districts to report financial information with an accrual accounting system. Also, there is enough freedom of definition between and among expenditure categories that transactional data are reported in accounts that were not assigned for special education. With the reported data that were available, this study was not able to determine the revenue and expense totals by fiscal periods for special education. The study concludes with recommendations that have policy implications. Three tables summarize the statistical findings of the study as they correspond to the three types of school districts in Illinois: elementary, high school, and unit (elementary and high school combined). Appended are 10 abstracts on Illinois educational finance. (SI)

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FINANCIAL OPERATIONS**

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April 1989

This series of monographs is dedicated to Professor Lucy Jen Huang Hickrod, late of the Sociology Department of Illinois State University. Illness has forever taken Professor Huang Hickrod from intellectual labors, but she remains an inspiration to her husband, her family and her many friends. Sic transit Gloria Mundi.

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ABSTRACT

This study began as a cost study of special education programs in Illinois public education. However, that mission could not be carried out because the audited financial data for Illinois schools did not allow it. Instead, the study concluded that a revamping of the manner in which cost data are reported for categorical programs is in order. Further research should investigate the feasibility of formulating such a reporting system for special education and implementing a pilot program.

INTRODUCTION

In keeping with the focus of the MacArthur/Spencer monograph series and the continuing equity studies by the Center for the Study of Educational Finance at Illinois State University, this work began as a study of the impact of special education costs on equity. An attempt was to be made to determine if the burden of extraordinary, nonreimbursed costs for special education programs was divided equally or, as it was suspected, unequally among school districts in Illinois. Interest in special education costs and their impact on the financial operations of local school districts was prompted by the observation that the extraordinary costs of some special education programs made it difficult to achieve an equitable allocation of financial resources to other educational programs in some school districts in the state. However, midway through the study, the flow of the analysis changed, and the results fell short of the intended objective. The annual financial reports for Illinois school districts do not allow the type of analysis that was planned here, even though they appear as if they should. Furthermore, they are the only comprehensive source of information about program revenue and expenditures that have been available for this type of research.

Two problems existed with the data source: Illinois does not require school districts to report financial information with an accrual accounting system that would attribute revenue to fiscal periods in which it was earned and expense to fiscal periods in which it was incurred. Also, there is enough freedom of definition between and among expenditure categories that transactional data is reported in accounts that were not assigned for special education. With the reported data that was available, this study was not able to determine with accuracy and confidence the revenue and expense totals by fiscal periods for special education. The study concludes with recommendations that have policy implications. At the end of this monograph there are three tables that summarize the statistical findings of the study. Essentially, based on studies that preceded this one and the implications of certain data, it is safe to say that special education costs can be an extraordinary burden for school districts. Depending on the mix of services that a district must provide and the incidence of students requiring those services, a district might bear a significant added cost burden that is not fully reimbursed by mandating agencies. If that district is "poor," in terms of property-wealth, its already poor general state aid equity position is severely impacted by the added burden of support for special education. (See other monographs in the MacArthur/Spencer series regarding "poor" and "rich" districts.)

The assertable proposition in this study--the thesis--was to be that special education costs impact adversely upon financial equity in Illinois school districts. Equally assertable and contradictory--the antithesis--are the results apparent in data reported in this study, that some districts appeared to have received more reimbursement than they incurred in expense. The higher level of truth--the synthesis--is most likely somewhere in between, that districts do not make money by offering special education programs and that the reimbursement mitigates or has a neutral effect on the equity condition.

ANALYSIS

In order to study the available evidence of financial burden, it was necessary to derive the net cost of special education, to measure its relationship with total instructional costs, and to attempt to determine the unreimbursed burden on the districts. The latter was to be achieved by correlating the costs with equalized assessed valuation (EAV) and average daily attendance (ADA). The initial data were taken from the Illinois General State Aid Entitlement claims, the Funding and Child Tracking System databases, and the Annual Financial Reports of Illinois school districts for the fiscal years 1983, 1984, 1985, 1986, and 1987. The number of special education students served was compiled from the P.L.94-142 and P.L.89-313 program data in Illinois school districts, and, to avoid student duplication, unique student identification numbers were selected from the two program databases.

The initial analysis computed the total special education revenue, the total special education cost, the net program cost, and the net cost per special education student. Additionally, the percentages of special education costs to instructional cost and to total educational cost were calculated. The results were directed to business officials of several school districts who were asked to verify the cost data. In three out of four school districts, the financial information from the analysis did not agree with the officials' cost summaries. Misunderstanding about the use of accounts for special education financial transactions by districts and inaccurate recording in the Annual Financial Reports accounted for the discrepancies. In the initial analysis, it appeared as if some districts received revenue that exceeded the cost of the programs. This appeared as a negative cost per special education student--revenue exceeding expenses.

Nonprogrammed payments, i.e., the expense of placing special education students with another district, were reported as revenue by the district that furnished the service. The costs for personnel and materials were reported by the provider also, compounding the expense, once as nonprogrammed payments and again as program expenses.

Instructional costs were included in the cost analysis of the study. Support service costs were not included, and they comprise a significant portion of special education costs. To include the support service costs (the salaries and benefits, etc. of special education director, psychologists, and other support personnel) would have resulted in the inclusion of the regular program support service personnel costs as well. It was impossible to sort out special education support service costs from regular program support service costs; consequently, revenue was factored into the analysis that was not offset by concomitant costs. Approximately 75% of special education costs were for instruction; the remainder was for support services and administrative overhead.

SPECIAL EDUCATION REVENUE

State

In Illinois, the state reimbursement revenue for special education personnel is for personnel who perform services for approved special education programs. For the full-time special education director, the full-time psychologist, and the full-time teacher for deaf or hard-of-hearing preschool children, the state reimbursement is \$8,000. For any full-time special education professional worker, the reimbursement is \$8,000; that is limited to speech correctionists, school social workers, school psychologists, psychologist interns, school social work interns, school nurse interns, certified school nurses, special administrative interns, registered therapists, professional consultants, special education administrators or supervisors, and special education certified teachers. Frequently, revenue appropriations for reimbursement to Illinois

school districts for personnel and materials must be prorated at less than one hundred percent of claims made. For physically handicapped children in home or hospital instruction, the reimbursement is one-half of the teacher's salary, but not more than \$1,000 annually per child or \$8,000 per teacher. For personnel working with blind or partially sighted children the state reimburses the local districts on one-half of the salary, but not more than \$400 annually per child. For noncertified employees working in any approved class or program, the reimbursement is the lesser of one-half of the salary paid or \$2,800 annually per employee.

The tuition for handicapped pupils attending private special education facilities is reimbursed under a two-tier state reimbursement system. The first tier is the difference between the district's per capita tuition charge for regular pupils and the lesser of \$4,500 or the tuition cost of the facility providing the service. In the event the tuition charge is greater than the district's per capita tuition charge for regular pupils plus \$4,500, the state will reimburse in the second tier the excess amount plus the amount calculated in tier one.

Revenue reimbursement for extraordinary costs of special education programs are those in excess of the district's per capita tuition charge for the prior year or \$2,000, whichever is less.

The School Code of Illinois authorizes "current funding" to school districts (reimbursement in the fiscal year in which the costs are incurred) for providing pre-approved educational services to handicapped children residing in orphanages, children's homes, state-owned housing units, foster homes, housing provided by other state agencies, or state residential units. There are also reimbursements for special education materials.

Federal

Public Law 94-142 was enacted to: (1) assure that all handicapped children have a free, appropriate public education available to them, (2) assure that the rights of handicapped children and their parents are protected, (3) assist states and localities in providing for the education of handicapped children, and (4) assess and assure the effectiveness of efforts to educate such children. States have been entitled to amounts for handicapped children ages 3 through 21 who were receiving special education and related services and who were not counted under the provisions of Public Law 89-313 (Education Consolidation and Improvement Act, Chapter I). This financial aid is apportioned by the applicable percentage of the average per pupil expenditure in public schools in the United States. Seventy-five percent of the annual grant has been designated to flow to local school districts based upon their census of handicapped children and 25% has been designated as discretionary funds for the states, primarily for regional special education programs, supplemental room and board fees for children placed in private facilities, and state administration.

THE PRICE STUDY

In 1981, Dr. Samuel Price, a Research Associate of the Center for the Study of Educational Finance at Illinois State University, completed a study of special education costs in Illinois school districts. At that time, too, Price found special education costs analysis to be very difficult at the local district level; therefore, he attempted to perform his analysis at an aggregated state level. Price observed that the ideal situation would be random distribution of handicapped students among school districts. However, there is evidence that there are larger numbers of EMH students in poorer school districts, perhaps because of the strong empirical link observed between poverty and lowered levels of cognitive functioning of school children. This has led to an understanding, and even an anticipation, of some small negative correlations between wealth and the concentration of handicapped students in schools (Price, 1981).

There was a strong positive correlation at the elementary level between the concentration of handicapped students and the wealth of a district. One commonly held notion was that parents of handicapped students tended to migrate away from districts with poor special education programs to districts which offered better special education programs.

Price concluded that the special education funding system should be based on financial weightings of concentrations of handicapped students. According to Price, higher concentrations of handicapped students in some wealthy districts existed because the districts identified special needs students and were willing to pay higher special education costs, whereas poorer districts did not identify handicapped students in order to avoid the extra costs. He suggested the State provide case-finding grants for districts having less than the statewide average of handicapped students (Price, 1981). According to Price, the disparity that was found between the concentrations at the elementary and secondary levels may have been attributable in part to the certification of teachers. It was more difficult then to become certified at the secondary level and, consequently, more difficult to extend the curricular program into the secondary level. Dr. Price was not able to determine all of the costs of special education nor the fiscal burden to local school districts imposed by mandated special education programs.

THIS STUDY

In Illinois, at the end of each fiscal year, school districts employ auditing firms to prepare comprehensive reports of the financial operations for the preceding twelve months. The reports, entitled, "The Annual Financial Report" includes audited details about the actual revenue and expense transactions of the school district. These data are reviewed by financial analysts of the Illinois State Board of Education. In so far as possible, this process ensures that the data reported are accurate. The following sources of financial and statistical data were utilized in this study:

- A. General State Aid Entitlement Claims for the three fiscal years, ending with FY1987. Equalized Assessed Valuation (EAV) and Average Daily Attendance (ADA) were used as measurements of wealth and need.
- B. Fund and Child Tracking System (FACTS) tapes for the same three years.
- C. Annual Financial Reports (AFR) for Illinois school districts for 1984-85, 1985-86, 1986-87. The reports filed by special education joint agreements were not used. (Districts served by cooperatives show all the costs but very little revenue because the cooperatives are the fiscal agents.)
- D. Expenses incurred by a district for the special learning experiences provided to children that by virtue of their individualized education plan fall into one or more of the following functional categories:
 - 1. Mental impairment
 - 2. Physical impairment
 - 3. Maladjusted (emotional disorder, behavior disorder, maladjustment related to social or cultural circumstances or maladjusted as a result of health impairment either temporarily or permanently which interferes with learning; autistic children fall into this category)

4. Specific learning disabilities (children with deficits in perception, conceptualization, language memory, attention, impulse control or motor function)
 5. Multiple impairment (severe impairments which significantly affect ability to benefit from the regular educational program)
 6. Other (category for children who could not be classified in the preceding areas)
- Excluded from the broad category of special education were the revenues and costs for gifted and bilingual programs.
- E. Total instructional cost and total education expenses were utilized. Total instructional costs were the expenses incurred in classroom instruction for all pupils in the districts. Total educational costs included the instructional costs, support services, community service, nonprogrammed charges, and debt services.
 - F. The costs included all salaries and benefits, purchased services, supplies and materials, capital outlay, tuition, and other expenses of the programs.
 - G. The revenue line-items that were utilized were the following:
 1. Special education tuition received from pupils, parents, welfare agencies, other private sources or other districts.
 2. State reimbursement for the following:
 - a. Personnel reimbursement, private school tuition, room and board, extraordinary special education costs, and special education orphanage program costs
 - b. Vocational training of special education pupils
 - c. Orphans' tuition
 3. Federal reimbursement for the following:
 - a. Chapter I, handicapped children
 - b. PL 94-142 (Education of the Handicapped Act), preschool children
 - c. PL 94-142 for room and board
 - d. PL 94-142 for regional programs
 - e. PL 94-142 flow-through funding

The major revenue that was not included in this study was the amount raised locally through the special education tax levy. This was excluded because special education tax revenue was directly related to the wealth of districts (and with the tax rate, although districts usually levy consistently at the maximum rate) and the impact on equity would have been neutral.

The category of expenses that was left out of the equation was support services—expenses for supervisory personnel, psychologists, social workers, etc. In the Illinois school district annual financial report, the expenses for support services are not reported separately by program; therefore, the expense for special education could not be identified and had to be omitted from the equation.

In this study, the equation that was utilized to derive the net cost to the local school district for special education is expressed as follows:

DIRECT EXPENSES	MINUS	CATEGORICAL REVENUES	EQUALS	NET COST
Instructional costs for: { Mental Impairment Physical Impairment Maladjusted Educationally Deprived Spec. Learning Disabled Multiple Impairment Other Other Payt. Govt. Units Payt. Spec. Programs }	—	{ Spec. Ed. Tuition Spec. Ed. Instr. Aid Dept. Rehab. Service Orphans Tuition Chap I, Handicapped EHA Preschool EHA Room/Board EHA Flow Through }	=	LOCAL DISTRICT BURDEN

Program Cost Definitions:

Mental Impairment. Special learning experiences for pupils identified as being mentally impaired, according to degree of impairment. Children in this category are classified educationally as educable mentally handicapped, trainable mentally handicapped, and severely mentally handicapped.

Educable Mentally Handicapped. Those children who because of impaired intellectual development (as determined by individual psychological evaluation) are incapable of being educated profitably and efficiently through ordinary classroom instruction.

Trainable Mentally Handicapped. Those children who because of impaired intellectual development (as determined by individual psychological evaluation) are incapable of being educated profitably and efficiently through ordinary classroom instruction or special educational facilities for educable mentally handicapped children.

Severe and Profound Mentally Handicapped. Those children who because of impaired intellectual development (as determined by individual psychological evaluation) are incapable of being educated profitably and efficiently through ordinary classroom instruction or special educational facilities for educable mentally handicapped or trainable mentally handicapped children.

Physical Impairment. The child exhibits a physical impairment, either temporary or permanent, which interferes with his/her learning and/or which requires adaptation of the physical plant.

Orthopedic Impairment. Those children who because of impaired physical development and/or deformities, diseases, and injuries of the bones, joints, and muscles are prevented from educational development.

Blind. Those children who because of impaired physical development are without the power of sight and as such they cannot develop their educational potential without special services and materials.

Visual Impairment. The child's visual impairment is such that through normal classroom operation he/she would not be educated efficiently and could not develop his/her educational potential without special services and materials.

Deaf. Those children who because of impaired physical development are totally unable to hear. This prevents full awareness of environmental sounds and spoken language, limiting normal language acquisition and learning achievement.

Hearing Impairment. The child's residual hearing is not sufficient to enable him/her to understand the spoken word and to develop language, thus causing extreme deprivation in learning and communication.

Deaf/Blind. Those children who because of impaired physical development are totally unable to hear and are without the power of sight and as such they cannot develop their educational potential without special services and materials.

Speech and/or Language Impairment. The child exhibits deviations of speech and/or language processes which are outside the range of acceptable variation within a given environment and which prevent full social or educational development.

Maladjusted. Special learning experiences for pupils identified as being poorly adjusted and unable to adjust properly to the circumstances of their environment.

Emotional Disorder. The child exhibits an affective emotional disorder which significantly interferes with his/her learning and social functioning; e.g., delinquency prone.

Behavioral Disorder. The child exhibits an affective disorder and/or adaptive behavior which significantly interferes with his/her learning and social functioning.

Educational Handicapped. The child exhibits educational maladjustment related to social or cultural circumstance.

Other Health Impairment. The child exhibits a health impairment, either temporary or permanent, which interferes with his/her learning. Autistic and autistic-like children should be included in this category.

Specific Learning Disabilities. Special learning experiences for pupils identified as having deficiencies in one or more aspects of the cognitive process and as being under-achievers in relation to general level or mode of their overall abilities; e.g., deficits in perception, conceptualization, language memory, attention, impulse control or motor function.

Multiple Impairment. The child exhibits two or more impairments, severe either in nature or in total impact, which significantly affects his/her ability to benefit from the educational program.

Other. Special learning experiences for pupils which cannot be classified in the preceding service areas.

Revenue Definitions:

A. Local

Special Education Tuition. Amounts received from pupils, parents, welfare agencies, private sources, or other LEA's for special education tuition.

Tuition From Pupils or Parents. Amounts received from pupils or parents for special education tuition.

Tuition From Other Districts. Amounts received from other LEA's for special education tuition.

B. State

Special Education. Amounts received from the State representing reimbursement for Special Education as authorized in Article 14 of The School Code of Illinois.

Department of Rehabilitation Services. Amounts received from State funds for vocational training of special education pupils.

Orphans' Tuition. Amounts received from the State for a portion of the cost of orphans tuition as authorized in Section 18-3 of The School Code of Illinois.

C. Federal

ECIA, Chapter 1-Handicapped (Public Law 89-313). Amounts received from Federal Funds for approved handicapped programs.

EHA-Preschool Incentive Grant (94-142,B). Amounts received from Federal Funds for approved EHA preschool programs.

EHA-Room and Board Reimbursement (94-142,B). Amounts received from Federal Funds for approved EHA room and board reimbursements.

EHA-Regional Programs (94-142,B). Amounts received from Federal Funds for approved EHA regional programs.

EHA-Flow Through (94-142,B). Amounts received from Federal Funds for approved EHA flow-through funding.

THE MCLURE STUDY

Special education costs were defined in the McLure study as the average instructional expenditure per pupil, including salaries of teachers, academic support staff, and auxiliary services (McLure, Burnham, Henderson, 1975). Academic support staff included supervisory and administrative personnel, counselors, psychologists, social workers, librarians, therapists, and teacher aides. Auxiliary services included clerical and secretarial personnel, custodians, and instructional supplies.

The McLure study utilized data from 23 Illinois school districts to make instructional unit cost comparisons among special education programs. The average number of pupils per certified teacher in special education provided the means to show the resource intensity of programs for pupils with exceptional needs (a relationship of resource needs to the severity of the handicap).

The McLure study showed net special education program costs for the 23 school districts, but not the total cost of the special education programs nor the total instructional cost. It was not possible to determine the percent of net cost burden to the districts. It was possible to see how much of the total extra costs were offset by the state and federal categorical aid given to the districts for their special education programs. Twenty percent of the extra costs was offset by state aid and thirty percent by federal aid, leaving fifty percent as the average net cost of special education programs as the local school districts' burden. The individual district percents of local burden ranged from 14% to 60%. Some districts received as much as 86% of their extra costs from state and federal aid while some received as little as 40%. Of special interest in the McLure results were three districts, of the 23 listed, which reported receiving more categorical funds from state and federal sources than the extra costs that were incurred. One district received \$225,000 in aid for \$114,000 in special education costs. Another received \$88,000 for \$23,000 in costs and the third received \$2,067,000 for \$1,491,000 in costs.

Despite the fact that the McLure research factored the support service cost into into the cost equation, those three districts reported revenues in excess of expenses. Since governmental funds are accounted for on a spending or financial flow measurement focus, one or two aberrations in accounting might have occurred in those three districts: (1) Reimbursements may have overlapped fiscal periods, that is, reimbursement from a prior period may have been received in the fiscal year McLure studied along with reimbursement for that current year. (2) Expenses of the special education programs may have been misapplied to other programs and not to special education. In one of these situations, revenue for the period would have been overstated; in the other, expenses in the program would have been understated, allowing for an unusual financial condition.

MISSION DENIED

Since, up to this point, nothing yet has been written about the results of the study, the reader may now be concluding that the current study ran into some obstacles. The development of an accurate net cost for special education programs in Illinois school districts proved to be an elusive goal. The identification of targeted revenue was also difficult to achieve. No one with knowledge of school finance and, specifically, special education program costs and reimbursements, would venture to say that a district could "make money" by receiving more revenue from state and federal sources for special education programs than it takes to support the programs. Yet, in this study, that is the way it appeared among 30% of the elementary districts that showed negative costs per pupil. Among the high school districts, 52% reported negative costs per pupil; and among the unit districts, 17%. The omission of support service costs may have contributed to the negative cost picture; on the other hand, factoring in special education tax revenue might have sent it back in the other direction. The source data that were used were the subjects of all sorts of different interpretations by districts and auditors. Moreover, the mission of the original study was frustrated because of inadequate program cost data. Special education cost studies are subject to underlying accounting problems, misinterpretation of direct and indirect costs, and uncertainty in defining the scope of services (Andersen, 1982).

.....often the best policy analysts can do is to indicate how much is being spent on certain groups, or proportionately how much more is being spent on them than on normal children, and leave it to a political consensus to decide whether this is appropriate (Guthrie, Garms, and Pierce, 1988, p. 311).

This study used the "macro" approach to the analysis of costs and offsetting revenue. The large scale analysis of school district year-end financial reports precluded any sort of program cost analysis to determine if the apparent "profit" (i.e., revenue exceeding cost) was attributable to one type of special education program or another. Raphael, Singer and Walker forewarned the researcher that a micro approach might have been futile:

...districts rarely budget expenses by program. Furthermore, data from different districts are usually incomparable because they are collected and reported in different ways....Most importantly, the collection of accurate data regarding the composition of services, both direct and indirect, which a "typical" child is receiving is difficult and expensive (1985, p. 70).

Perhaps these are reasons enough to study the Resource Cost Model suggested by Geske and Johnston because it developed standard costs data that would approximate actual costs (Geske and Johnston, 1985).

Further complicating a financial analysis of special education programs for children in public school districts is the mix of children in the districts and the types and quality of services that contribute to cost differences. "[Total] children served will trigger additional state and federal aid, thereby driving down total program costs to the [local education agency]" (Andersen, 1982, p. 421). In this study where costs in some districts were less than the revenue, it was possible that both the types of handicaps and the services required were less of a cost burden on the districts than the revenue earned as a result of providing the programs. The Raphael study indicated that students in special class settings had less expended on them than main-streamed students, so the programming system could have kept costs below the revenue earned.

Further suggestion of the possibility that costs may vary more than revenues and that, as a result of the variation of costs between districts, revenues might exceed costs in some "lucky" or cost-conscious districts appeared in the Lander and Sederberg study. In the literature they cited, costs varied by handicapping condition, by program, and by district. A study by Rossmiller suggested that the mix of programs that a district must support may result in a lesser or a greater financial burden for the district (1982). The results of the Lander and Sederberg study indicated that one of the case-study districts might have been an exception to their overriding conclusion that costs exceeded revenue. In that district, revenue slightly exceeded expenditures because employee benefit costs were underestimated. In that case, the results might have been different had the separate, non-public, special education service been identified as a separate cost center because the tuition receipts for the non-residents had been large. However, tipping the scale back in the other direction, Lander and Sederberg found that the "greatest percent differences of expenditure exceeding revenue.....occurred in 'other personnel'" (In other words, support service personnel costs) (1983, p. 184).

This study did not include support service line items because the special education program costs could not be separated from regular program costs. Had it been possible to sift them out and to include them in this macro analysis, the "profit" phenomenon would have been abated somewhat. On the other hand, if the local special education tax revenue had been factored in as well, the "profit" phenomenon might have been restored. It is impossible to say for sure what might have been the picture if all of the shortcomings in the cost-analysis potential of the Illinois financial report had been overcome.

SUMMARY

Tables 1, 2 and 3, located at the end of this report, provide a set of numerical facts about the data. The three tables of values correspond to the three types of school districts in Illinois: elementary, high school and unit (elementary and high school combined). When the data were aggregated, the low range values per net cost for special education programs (Line 6) were negative for all three types of districts. The reported accounting data were spurious: either the revenue was overstated as a result of overlapping fiscal receipts, or the expenses were understated as a result of certain expenditures assigned to the wrong accounts and overlooked by auditors, or both of these accounting defects were present. Several district administrators were asked to verify the reported data and they confirmed that expenses were recorded in accounts other than those reserved for special education programs. They could not determine if the receipt of revenue caused the apparent "profit" for the special education program. The tables represent the final analysis in the study since it was not possible to extend the statistical analysis further because of the nature of the accounting data.

What can be inferred from this attempt to use audited financial data for an analysis of education costs? Most apparent is the conclusion that a complete cost analysis cannot be conducted with existing cost accounting formats. The aggregated financial information in the Illinois school district Annual Financial Report simply does not lend itself to disclosure of relevant program costs and revenues for a given fiscal period. Most districts in Illinois utilize the cash accounting system, not the accrual accounting system, and costs and revenue cannot be assigned to the period in which they were incurred and earned. Certain dimensions of the account coding system in the Annual Financial Report take precedence over others. In the aggregating process, the program cost data is subsumed in broader categories. Changes are currently being implemented in the special education account coding system that will improve the accessibility of program cost data. The reader should not reach the conclusion that program cost data should be the object of accounting policy for schools, however. That inference should be reserved until all of the ramifications to program policy can be anticipated before a financial reporting system is overhauled.

CONCLUSIONS

Apart from the financial information reported in the following tables, two conclusions can be reached in this study. The annual financial reporting system in Illinois for public school districts does not lend itself to cost studies of programs. Policy-makers in this State, for example, cannot gain access to accurate total cost data for special education, nor can they be given accurate total cost data for other programs in K-12 public education from the annual financial reports of the school districts. There is not one, required, uniform method of reporting accounting transactions, and there is latitude within the account classification system for differing interpretations about where transactions should be recorded. The major recommendation is that periodically (twice each decade would be sufficient) the State Board of Education should require from each district a comprehensive revenue and cost summary of special education programs, prepared in a uniform manner on a financial statement provided by the state agency, and filled out by the accounting firms that the districts employ to prepare the Annual Financial Report. Only then will it be possible to conduct equity, adequacy, and efficiency studies of the type found elsewhere in education finance.

Insufficient attention is given to costs in education. More attention must be directed toward developing cost information that accurately reflects the financial condition in school districts in Illinois. More interpretable data must be collected about actual conditions, before

deliberations about financial aid to ameliorate severe financial equity problems can be undertaken at the agency level or in the General Assembly. Otherwise, deliberation will lead to frustration and suspicion, and policy formulation will be either ineffectual or misdirected.

This study has prompted at least one impelling research agenda-item for the future: the development of an accurate and comprehensive accounting framework for the aggregation of educational cost data, with the caution that the resulting information be utilized judiciously. Educational policy must be based on societal, individual and economic needs and should not be simply cost-centered.

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Table 1
Elementary Districts: 1986-1987

Range of Values	Average	Midpoint	Low	High
1. Special Education Student Count	166	87	1	2,215
2. Total Cost for Special Ed Programs	\$ 217,443	\$ 46,957	0	\$ 3,951,555
3. Total Cost Per Special Ed Pupil	\$ 935	\$ 823	0	\$ 5,186
4. Total Revenue for Special Ed Programs	\$ 132,964	\$ 43,616	0	\$ 2,187,572
5. Total Revenue Per Special Ed Pupil	\$ 644	\$ 498	0	\$ 6,256
6. Net Cost for Special Ed Programs	\$ 84,479	\$ 11,613	-\$ 478,053	\$ 1,781,844
7. Net Cost Per Special Ed Pupil	\$ 288	\$ 231	-\$ 1,887	\$ 3,039
8. Percent Total Special Ed Cost of Total Instructional Cost	8.64%	8.54%	0	40.34%
9. Percent Net Special Ed Cost of Total Instructional Cost	2.58%	2.56%	-15.66%	20.78%
10. Total Instructional Cost	\$1,722,854	\$ 836,559	\$ 51,068	\$26,985,670
11. Percent Total Special Ed Cost of Total Educational Cost	5.74%	5.63%	0	31.27%
12. Percent Net Special Ed Cost of Total Educational Cost	1.76%	1.60%	-11.63%	14.15%
13. Total Education Cost	\$2,603,059	\$1,282,885	\$ 83,046	\$36,878,007
14. Average Daily Attendance	891	472	20	13,371
15. Special Ed Students/ Average Daily Attendance	18.27%	18.27%	1.04%	43.62%
16. Assessed Valuation Per Pupil	\$ 101,299	\$ 74,713	\$ 10,449	\$ 1,055,252

Data obtained from 1986-87 Annual Financial Reports and FY87 Funding and Child Tracking System.

Table 2
High School Districts: 1986-1987

Range of Values	Average	Midpoint	Low	High
1. Special Education Student Count	187	104	1	1266
2. Total Cost for Special Ed Programs	\$ 476,805	\$ 126,313	0	\$ 4,856,632
3. Total Cost Per Special Ed Pupil	\$ 1,769	\$ 1,542	0	\$ 6,817
4. Total Revenue for Special Ed Programs	\$ 219,673	\$ 64,188	0	\$ 2,371,213
5. Total Revenue Per Special Ed Pupil	\$ 899	735	0	\$ 3,894
6. Net Cost for Special Ed Programs	\$ 257,131	\$ 35,938	- \$389,828	\$ 2,703,203
7. Net Cost Per Special Ed Pupil	\$ 870	\$ 835	- \$ 2,110	\$ 4,707
8. Percent Total Special Ed Cost of Total Instructional Cost	6.79%	6.22%	0	22.65%
9. Percent Net Special Ed Cost of Total Instructional Cost	3.13%	3.23%	-14.19%	15.64%
10. Total Instructional Cost	\$4,681,123	\$2,208,174	0	\$36,428,610
11. Percent Total Special Ed Cost of Total Educational Cost	4.5%	4.16%	0	14.98%
12. Percent Net Special Ed Cost of Total Educational Cost	2.07%	2.28%	-8.34%	10.34%
13. Total Education Cost	\$7,078,031	\$3,288,362	\$170,305	\$60,767,490
14. Average Daily Attendance	1,698	926	43	12,303
15. Special Ed Students/ Average Daily Attendance	10.28%	9.94%	1.08%	25.41%
16. Assessed Valuation Per Pupil	\$ 136,568	\$ 118,154	\$ 33,714	\$ 1,441,337

Data obtained from 1986-87 Annual Financial Reports and FY87 Funding and Child Tracking System.

Table 3
Unit Districts: 1986-1987

Range of Values	Average	Midpoint	Low	High
1. Special Education Student Count	350	115	11	48,571
2. Total Cost for Special Ed Programs	\$ 675,912	\$ 70,688	0	\$170,216,176
3. Total Cost Per Special Ed Pupil	\$ 807	\$ 790	0	\$ 4,376
4. Total Revenue for Special Ed Programs	\$ 379,722	\$ 45,893	- \$ 1,483	\$ 89,360,323
5. Total Revenue Per Special Ed Pupil	\$ 521	\$ 439	- \$ 41	\$ 8,310
6. Net Cost for Special Ed Programs	\$ 296,190	\$ 27,117	- \$609,724	\$ 80,855,853
7. Net Cost Per Special Ed Pupil	\$ 287	\$ 324	- \$ 5,807	\$ 2,137
8. Percent Total Special Ed Cost of Total Instructional Cost	7.17%	6.99%	0	27.81%
9. Percent Net Special Ed Cost of Total Instructional Cost	2.5%	2.9%	-47.73%	15.6%
10. Total Instructional Cost	\$4,754,530	\$1,208,390	\$ 113,181	\$880,645,917
11. Percent Total Special Ed Cost of Total Educational Cost	4.83%	4.7%	0	18.6%
12. Percent Net Special Ed Cost of Total Educational Cost	1.74%	1.93%	-24.24%	10.18%
13. Total Education Cost	\$7,575,322	\$1,849,313	\$ 347,736	\$152,096,009
14. Average Daily Attendance	2,385	744	88	374,164
15. Special Ed Students/ Average Daily Attendance	15.53%	15.25%	6.05%	32.53%
16. Assessed Valuation Per Pupil	\$ 46,830	\$ 41,722	\$ 5,323	\$ 411,657

Data obtained from 1986-87 Annual Financial Reports and FY87 Funding and Child Tracking System.

ABSTRACTS OF THE MACARTHUR/SPENCER SERIES
ON ILLINOIS EDUCATIONAL FINANCE

1. Two Essays on the Political and Normative Aspects of American School Finance: An Historical Perspective, March 1987, 30 pages, G. Alan Karnes-Wallis Hickrod and James Gordon Ward

This monograph explores the political foundations of educational finance in the United States. The first essay outlines the contribution of public education to a democratic form of government and was written partially in response to a challenge to public education funding which appeared in Forbes magazine. The second essay surveys the basic concepts present in the modern study of educational finance, grounding that survey in a review of the first textbooks written in educational finance in the USA.

2. A Brief History of K-12 Finance in Illinois or 162 Years in Search of the Perfect Formula, April 1987, 14 pages, G. Alan Karnes-Wallis Hickrod

This monograph is a brief historical study of K-12 funding in Illinois stretching from before the Civil War to the present. It stresses the legislative history of the general grant-in-aid formula for K-12 education.

3. The Constitutionality of the K-12 Funding System in Illinois: Legal Issues. May 1987, 150 pages, David L. Franklin and Others.

A comprehensive and detailed discussion of constitutional challenges to the K-12 funding systems in nineteen states, this study focuses on the characteristics of the winning briefs in the litigation. While it does not actually write the brief, it denotes the points of law that would have to be won in order to mount a successful constitutional challenge. Applications are then made from this history of litigation to the particular Illinois situation. It is considered to be a companion volume to report #4 which deals with factual data that might be used in educational finance litigation in Illinois.

4. Documenting a Disaster: Equity and Adequacy in Illinois School Finance: 1973-1988, December 1987, 44 pages, G. Alan Karnes-Wallis Hickrod and Others.

This is a continuation of the monitoring series on the equity effects of the Illinois K-12 general grant-in-aid which has been published by the Center for the Study of Educational Finance for many years. In addition, it begins the investigation of the adequacy of the support system in Illinois. It has been widely quoted by the press for its stark conclusion: "We are doing a lousy job of school finance in Illinois."

5. The Concept of Adequacy in Illinois School Finance, October 1987, 24 pages, James Gordon Ward.

This is an exploration of the concept of adequacy including some operational definitions of the term. It also includes some empirical evidence and is related to the findings on adequacy of funding contained in report #4.

6. City Schools, Rural Schools, March 1988, 10 pages, James Gordon Ward.

This is a study of a nine-county region in East Central Illinois. Its focus is on the alleged benefits of school district consolidation. The findings cast some doubt on the oft-repeated charge that small rural districts offer sub-standard education.

7. Geographic Cost of Living Differences: An Update, August 1988, 20 pages, Walter W. McMahon.

This is an econometric study of geographic cost-of-living differences between states in the United States and between counties within Illinois. Geographic cost-of-living indices have many uses. In education these indices are used to adjust educational costs between geographic areas to obtain "constant" or "real" dollar differences in educational spending. The indices are being used in on-going research at the Center for the Study of Educational Finance in the Illinois State Board of Education in Springfield.

8. Guilty Governments: The Problem of Inadequate Education Funding in Illinois and other States, December 1989, 33 pages, G. Alan Karnes-Wallis Hickrod and Others

This study presents rank order changes between 1978 and 1988 of the 50 states on a number of school finance indexes of "adequacy." Data for both K-12 and higher education are provided. The study also looks at measurements of fiscal effort for both K-12 and higher education. In addition, an initial test of the effectiveness of school finance litigation on adequacy of funding is provided. The Illinois Constitution is also evaluated relative to adequacy of educational funding. The study highlights the dramatic drop in educational support in Illinois over the last ten years.

9. State Support of Higher Education: From Expansion to Steady State to Decline, 1969 to 1989, March 1989, 25 pages, Edward R. Hines, G. Alan Hickrod, Gwen B. Pruyne

State fiscal support of higher education is the focus of this analysis. Trends in funding higher education over a twenty-year period are discussed, using state tax fund appropriations, per capita appropriations in current dollars, per capita appropriations adjusted by the Higher Education Price Index, per capita appropriations adjusted by the McMahon Index (Mc/Sp #7), and measurements of elasticity.

10. Special Education Costs and the Impact on Illinois School District Financial Operations, April 1989, 15 pages, Robert Arnold, G. Alan Hickrod, Mary M. Polite

What is the impact of special education costs on equity? Do some districts receive more in reimbursements than they actually spend on special education programs? The study concluded that a revamping of the manner in which cost data are reported for categorical programs is in order.